abcam

Product datasheet

Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free ab247992



7 Images

Overview

Product name Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free

Description Rabbit monoclonal [EPR6244] to Interferon alpha/beta receptor 1 - BSA and Azide free

Host species Rabbit

Specificity In mouse and rat tissue lysates this product detects a band in the region of 100 kDa, however we

> believe this band is non-specific and is not interferon receptor alpha as the immunogen for this antibody shares only 55% homology with the mouse and rat protein. In addition this band also

migrates at a lower molecular weight than that detected in human samples.

Tested applications Suitable for: WB

Unsuitable for: ICC/IF or IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab247992 is the carrier-free version of ab124764.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

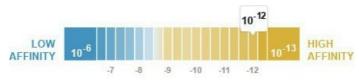
Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Dissociation constant (K_D) $K_D = 2.40 \times 10^{-12} M$



Learn more about K_D

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR6244

Isotype IgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab247992 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 90-130 kDa (predicted molecular weight: 64 kDa).

Application notes Is unsuitable for ICC/IF or IHC-P.

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Function Associates with IFNAR2 to form the type I interferon receptor. Receptor for interferons alpha and

beta. Binding to type I IFNs triggers tyrosine phosphorylation of a number of proteins including

JAKs, TYK2, STAT proteins and IFNR alpha- and beta-subunits themselves.

Tissue specificity IFN receptors are present in all tissues and even on the surface of most IFN-resistant cells.

 $lso form 1, iso form 2 and iso form 3 are expressed in the IFN-alpha sensitive myeloma cell line U266S. \\ lso form 2 and iso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 2 and iso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 2 and iso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S. \\ lso form 3 are expressed in the IFN-alpha resistant myeloma cell line U266S$

U266R. Isoform 1 is not expressed in IFN-alpha resistant myeloma cell line U266R.

Sequence similaritiesBelongs to the type II cytokine receptor family.

Contains 3 fibronectin type-III domains.

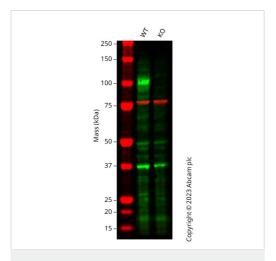
Post-translational modifications

Phosphorylated on tyrosine residues by TYK2 tyrosine kinase.

Cellular localization

Membrane.

Images



Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free (ab247992)

All lanes : Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] (ab124764) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: IFNAR1 knockout HeLa cell lysate

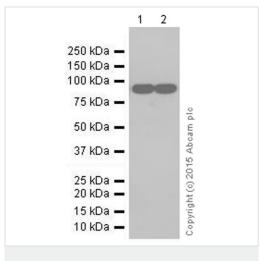
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 64 kDa **Observed band size:** 116 kDa

This data was developed using <u>ab124764</u>, the same antibody clone in a different buffer formulation.

Western blot: Anti-IFNAR1 antibody [EPR6244] (ab124764) staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (ab238078) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab124764 was shown to bind specifically to IFNAR1. A band was observed at 116 kDa in wildtype HeLa cell lysates with no signal observed at this size in IFNAR1 knockout cell line. To generate this image, wild-type and IFNAR1 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free (ab247992) **All lanes :** Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] (ab124764) at 1/1000 dilution (purified)

Lane 1 : Mouse brain tissue lysate

Lane 2 : Rat brain tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Rabbit monoclonal [EPR6244] to Interferon alpha/beta receptor 1 (ab124764) at 1/1000 dilution

Predicted band size: 64 kDa Observed band size: 90 kDa

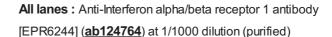
This data was developed using <u>ab124764</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

In mouse and rat tissue lysates this product detects a band in the region of 100 kDa, however we believe this band is non-specific and is not interferon receptor alpha as the immunogen for this antibody shares only 55% homology with the mouse and rat protein. In addition this band also migrates at a lower molecular weight than that detected in human samples.



Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free (ab247992)



Lane 1 : HEK-293 whole cell lysate

Lane 2 : HeLa whole cell lysate

Lane 3 : LNCaP whole cell lysate

Lane 4: SH-SY5Y whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 64 kDa **Observed band size:** 90-130 kDa

This data was developed using <u>ab124764</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

1 2 3 4 5 6 7 8

250 kDa —

150 kDa —

100 kDa —

75 kDa —

37 kDa —

25 kDa —

20 kDa —

15 kDa —

15 kDa —

10 kDa —

Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free (ab247992)

All lanes : Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] (<u>ab124764</u>) at 1/1000 dilution (unpurified)

Lane 1: Mouse brain whole tissue lysate

Lane 2: Mouse heart whole tissue lysate

Lane 3: Mouse kidney whole tissue lysate

Lane 4: Mouse spleen whole tissue lysate

Lane 5: Rat brain whole tissue lysate

Lane 6: Rat heart whole cell lysate

Lane 7: Rat kidney whole cell lysate

Lane 8: Rat spleen whole tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit lgG (H+L), peroxidase conjugated at 1/2000 dilution

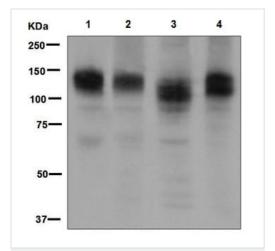
Predicted band size: 64 kDa

Exposure time: 3 minutes

This data was developed using <u>ab124764</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

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Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] - BSA and Azide free (ab247992)

All lanes : Anti-Interferon alpha/beta receptor 1 antibody [EPR6244] (ab124764) at 1/1000 dilution (Unpurified)

Lane 1: HeLa cell lysate

Lane 2: HeLa cell lysate treated with IFN-alpha

Lane 3: K562 cell lysate Lane 4: U937 cell lysate

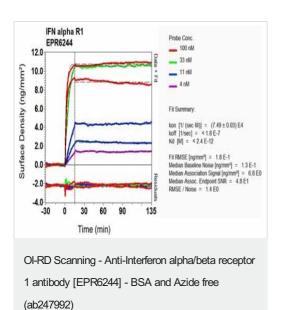
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-Rabbit HRP at 1/200 dilution

Predicted band size: 64 kDa

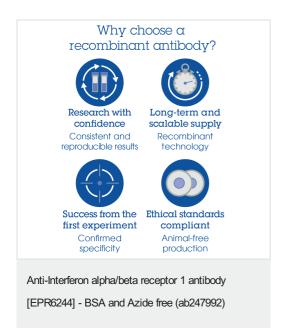
This data was developed using <u>ab124764</u>, the same antibody clone in a different buffer formulation.



This data was developed using $\underline{ab124764}$, the same antibody clone in a different buffer formulation. Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about Kn



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